

# Logical View of an End User Accessing the World-Wide-Web

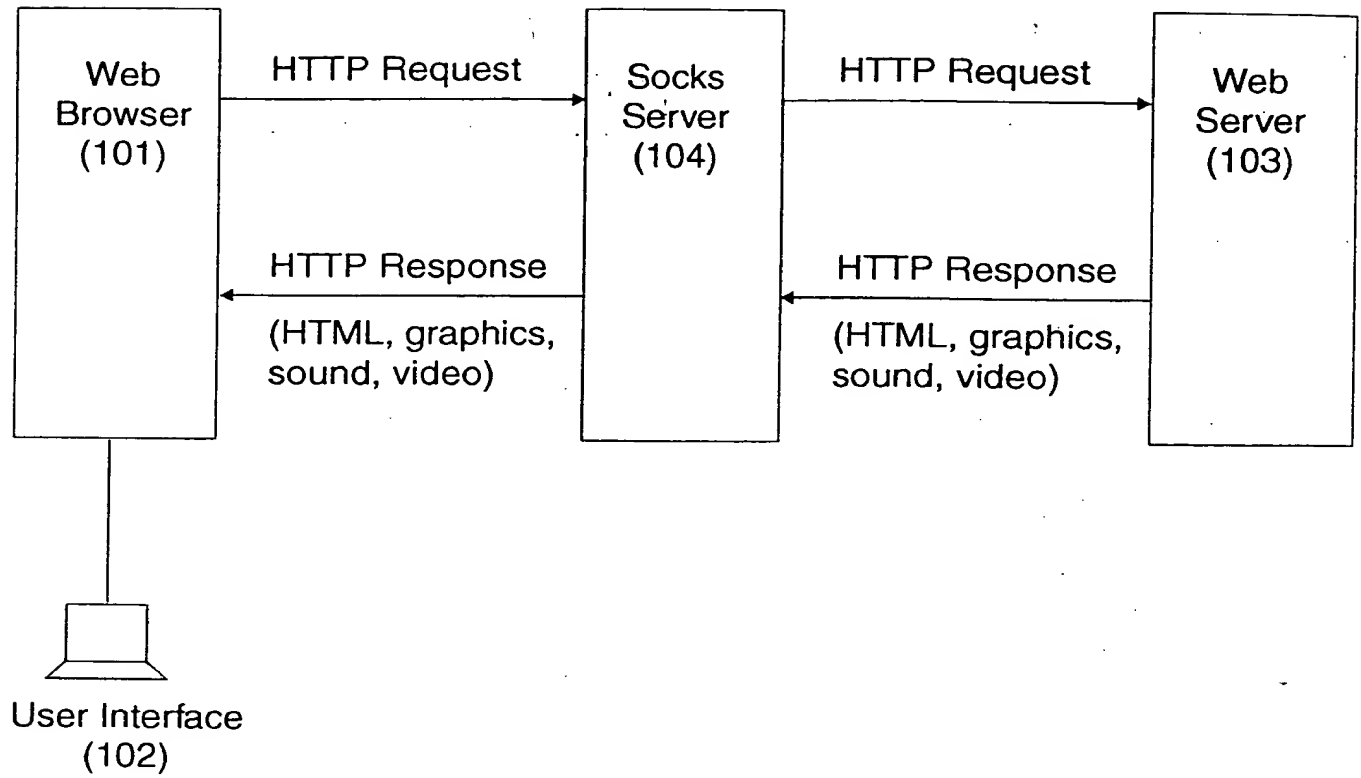


FIG. 1

# General Physical View of an End User Accessing the World-Wide-Web

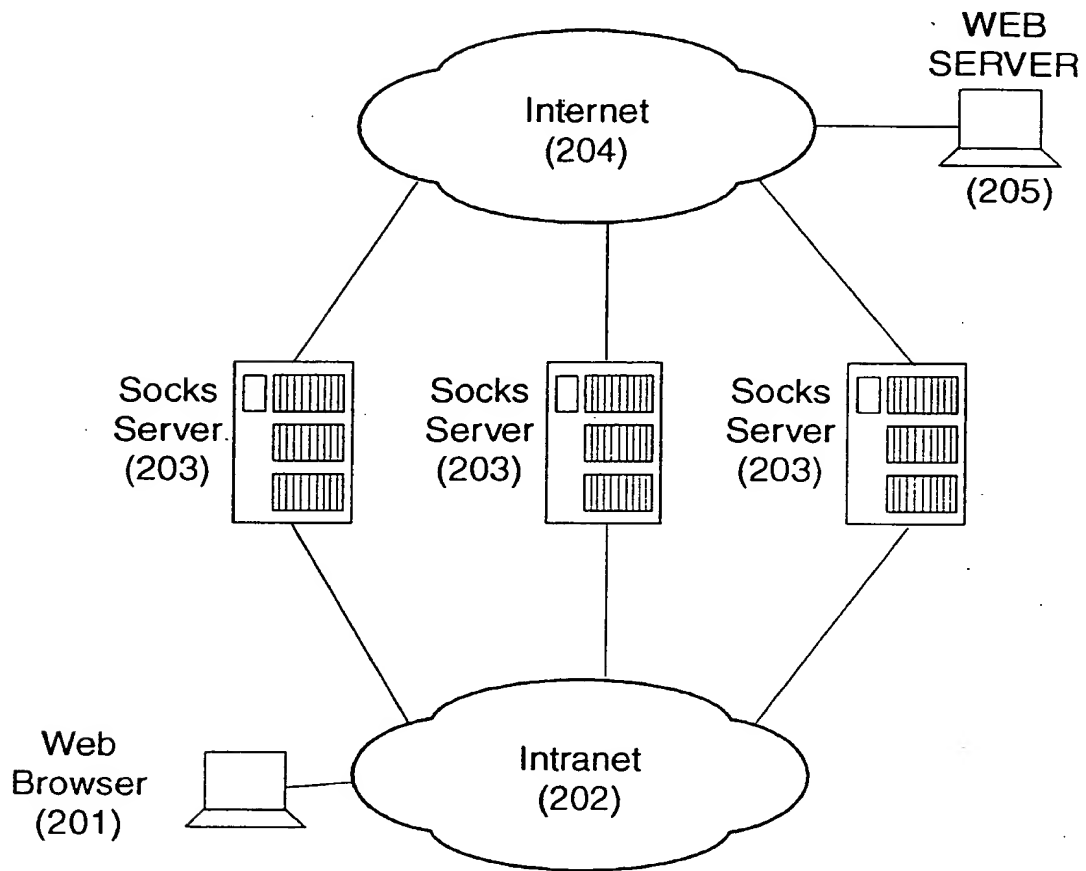


FIG. 2



# View of an End User Accessing the Web through a Socks Server

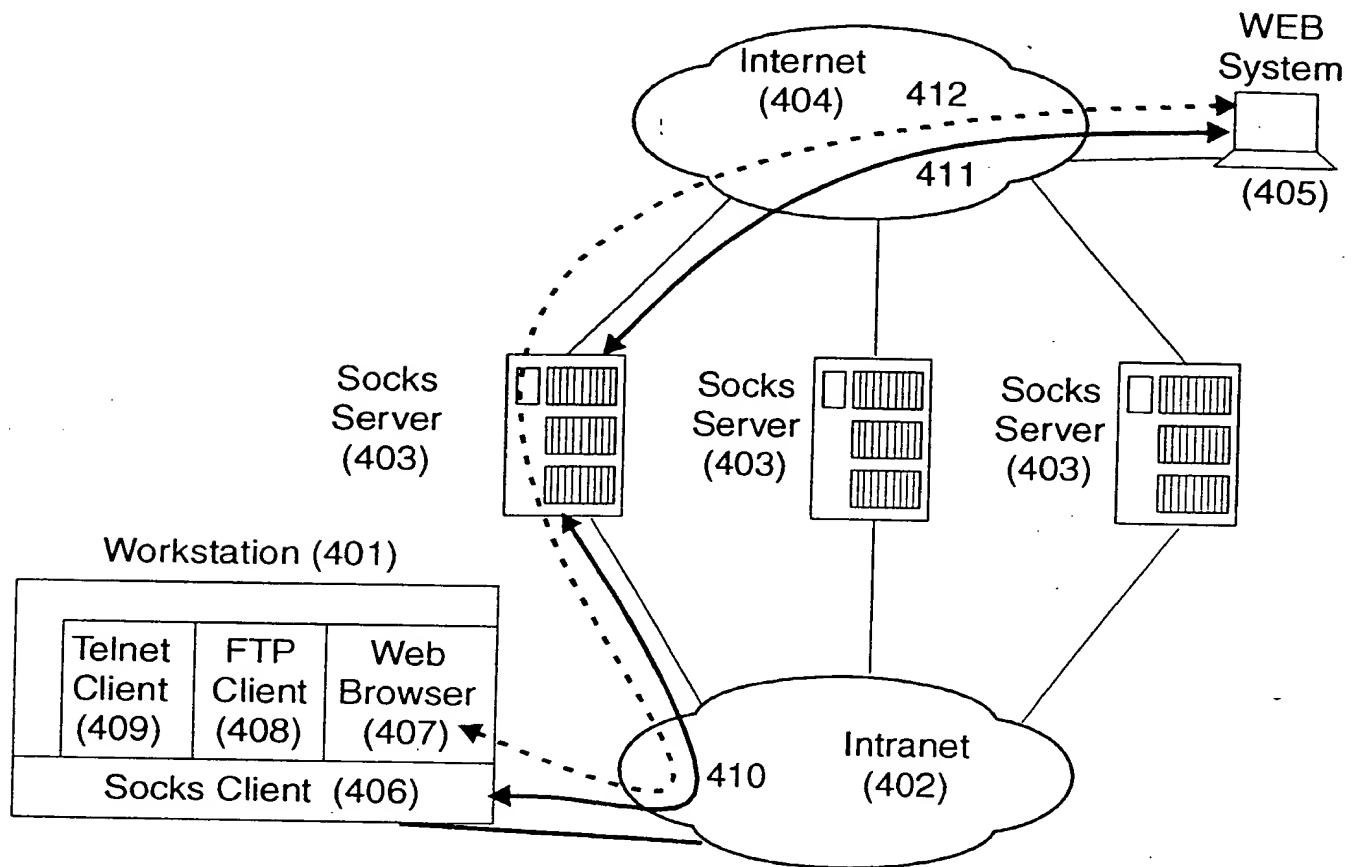


FIG. 4

# Dispatcher System for Socks Traffic

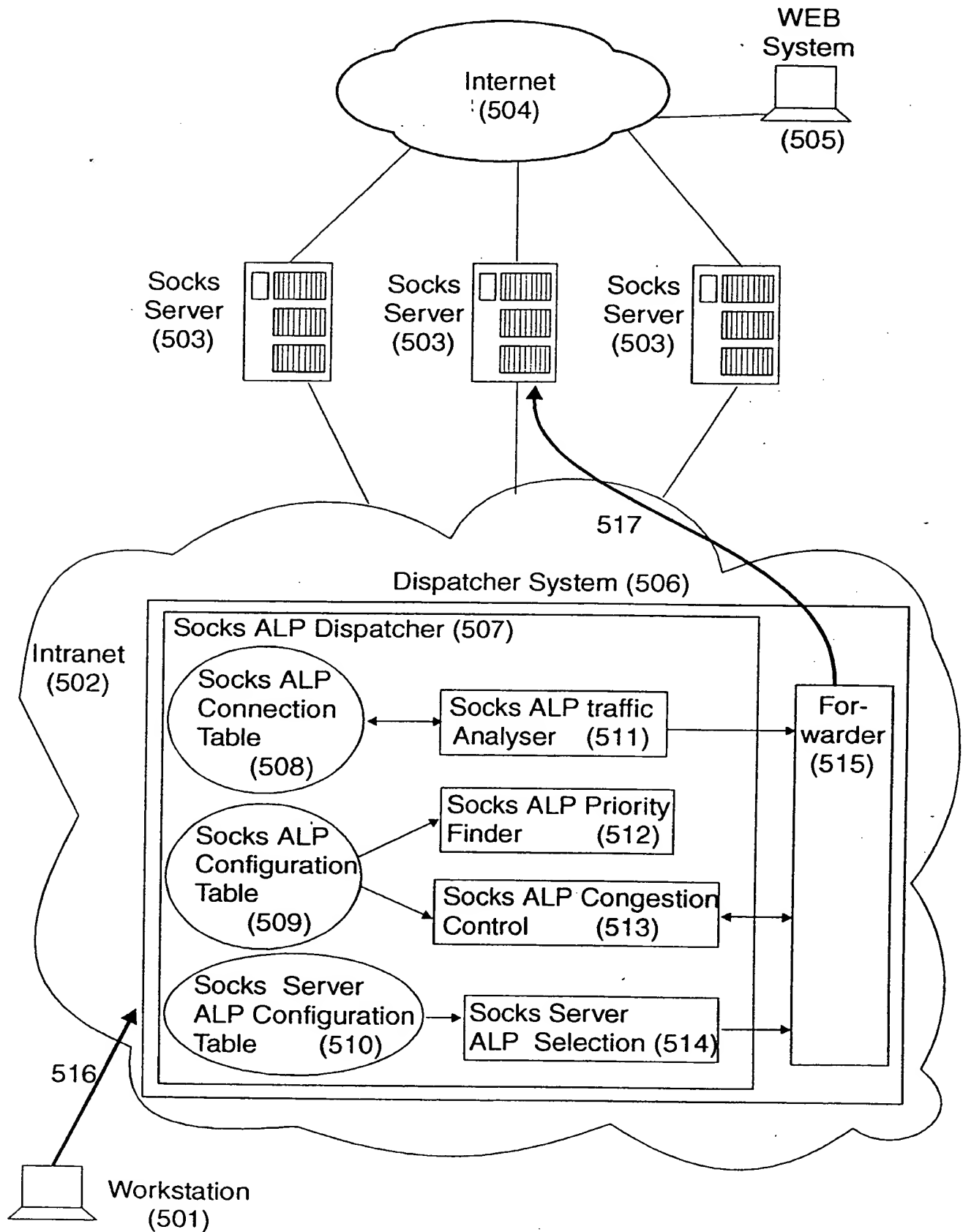


FIG. 5

Internal Tables of the Socks ALP Dispatcher System

Socks ALP Configuration Table  
(601)

Record (602)
Application_Level_Protocol (603)
Socks_Traffic_Priority (604)
Discard_Eligible (605)
(602)
(602)
.
.
.

Socks Server ALP Configuration Table  
(606)

Record (607)
Socks_Server_Identifier (608)
Socks_Server_Capacity (609)
Socks_Server_ALP_List (610)
(606)
(606)
.
.
.

Socks ALP Connection Table  
(611)

Record (612)
Cx_Source_IP_Address (612)
Cx_Source_Port (609)
Cx_ALP (610)
Record (612)
Record (612)
.
.
.

FIG. 6

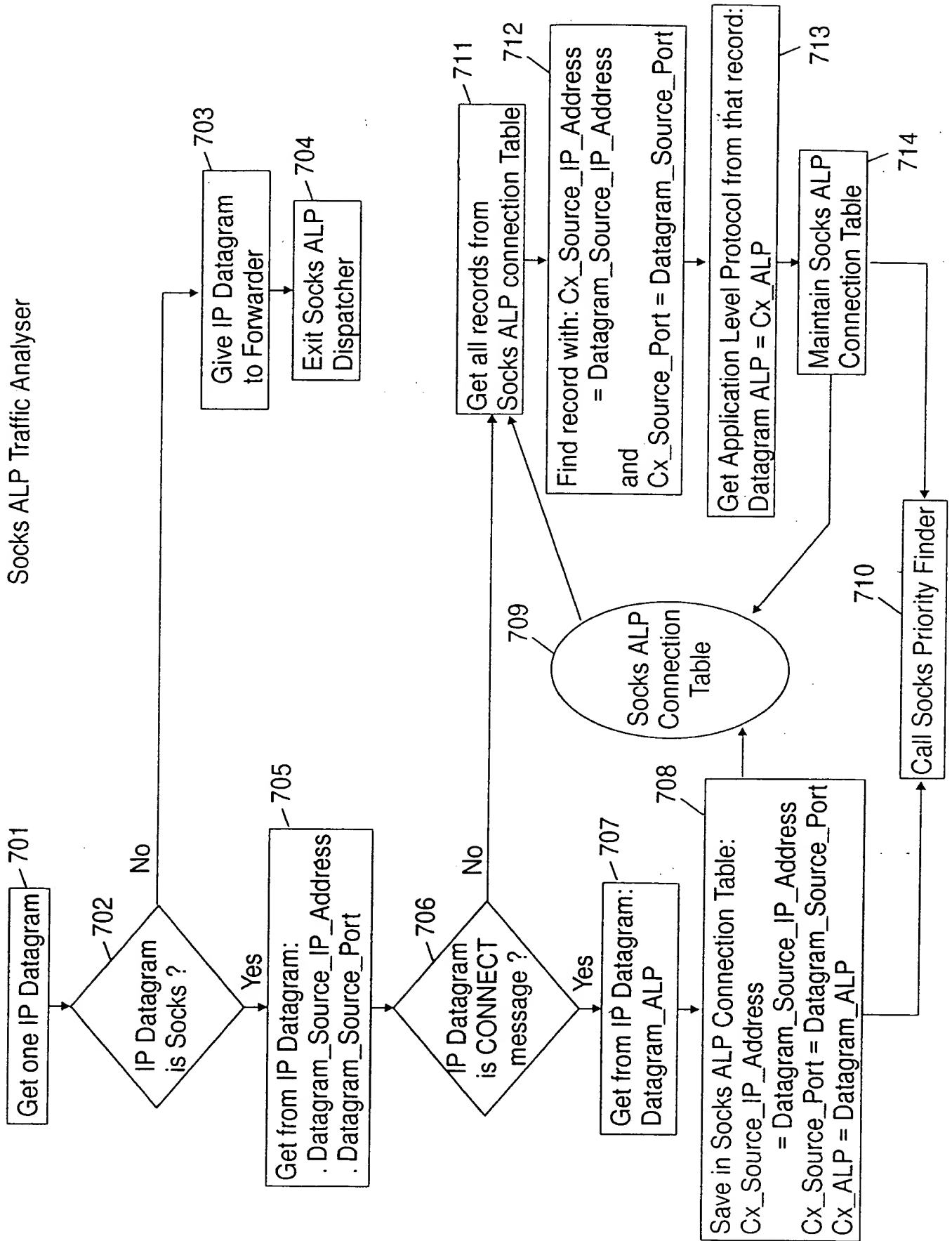


FIG. 7

# Socks Priority Finder

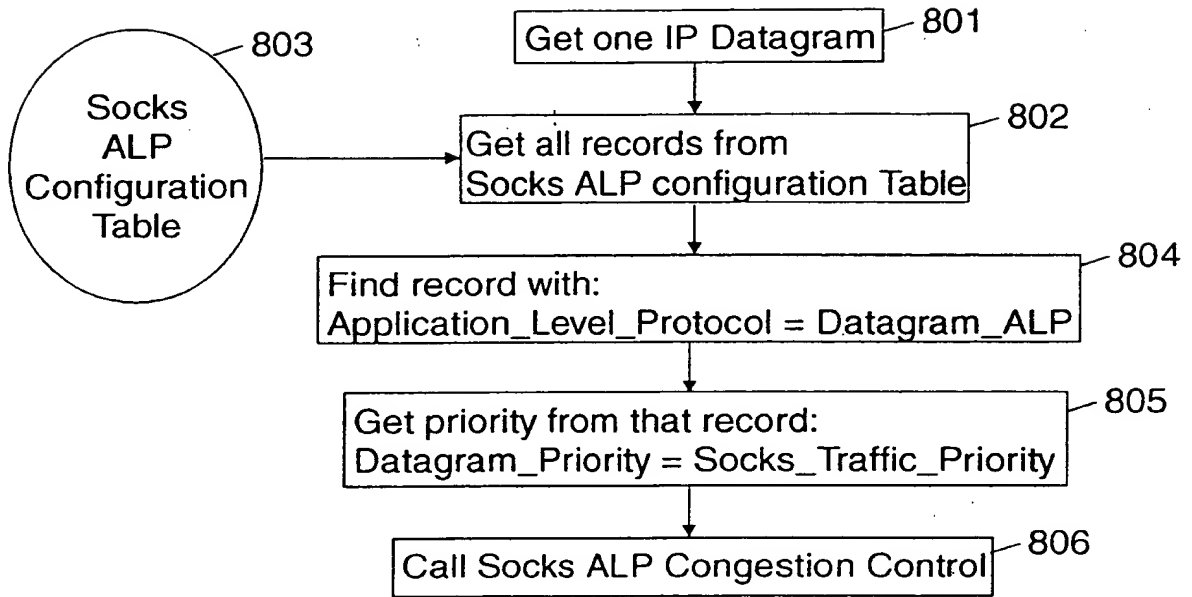


FIG. 8



```
graph TD
    903((Socks ALP Configuration Table)) --> 901[Get one IP Datagram]
    901 --> 902[Get all records from Socks ALP Configuration Table]
    902 --> 904[Find lis of records (List_ALP_D) when Discard_Eligible = YES]
    904 --> 905{Congestion condition ?}
    905 -- No --> 903
    905 -- Yes --> 906[Get Datagram_Priority and Datagram_ALP of the received IP Datagrams]
    906 --> 907[Get Datagram_Priority and Datagram_ALP of all IP Datagrams not yet sent]
    907 --> 908[Select the list (List D) of IP Datagrams with: . Lowest Datagram_Priority . Datagram_ALP is contained in List_ALP_D]
    908 --> 912{List D empty ?}
    912 -- No --> 905
    912 -- Yes --> 913[Discard all IP Datagrams with lowest Datagram_Priority]
    913 --> 903
```

The flowchart illustrates the congestion control process for Socks ALP. It begins with a 'Socks ALP Configuration Table' (903) leading to 'Get one IP Datagram' (901). This step leads to 'Get all records from Socks ALP Configuration Table' (902), which then leads to 'Find lis of records (List\_ALP\_D) when Discard\_Eligible = YES' (904). A decision diamond (905) checks the 'Congestion condition ?'. If 'No', it loops back to the start. If 'Yes', it proceeds to 'Get Datagram\_Priority and Datagram\_ALP of the received IP Datagrams' (906), then 'Get Datagram\_Priority and Datagram\_ALP of all IP Datagrams not yet sent' (907), and then 'Select the list (List D) of IP Datagrams with: . Lowest Datagram\_Priority . Datagram\_ALP is contained in List\_ALP\_D' (908). Another decision diamond (912) checks 'List D empty ?'. If 'No', it loops back to the congestion condition check (905). If 'Yes', it leads to 'Discard all IP Datagrams with lowest Datagram\_Priority' (913), which then loops back to the start of the process.

FIG. 9

### Socks Server ALP Selection

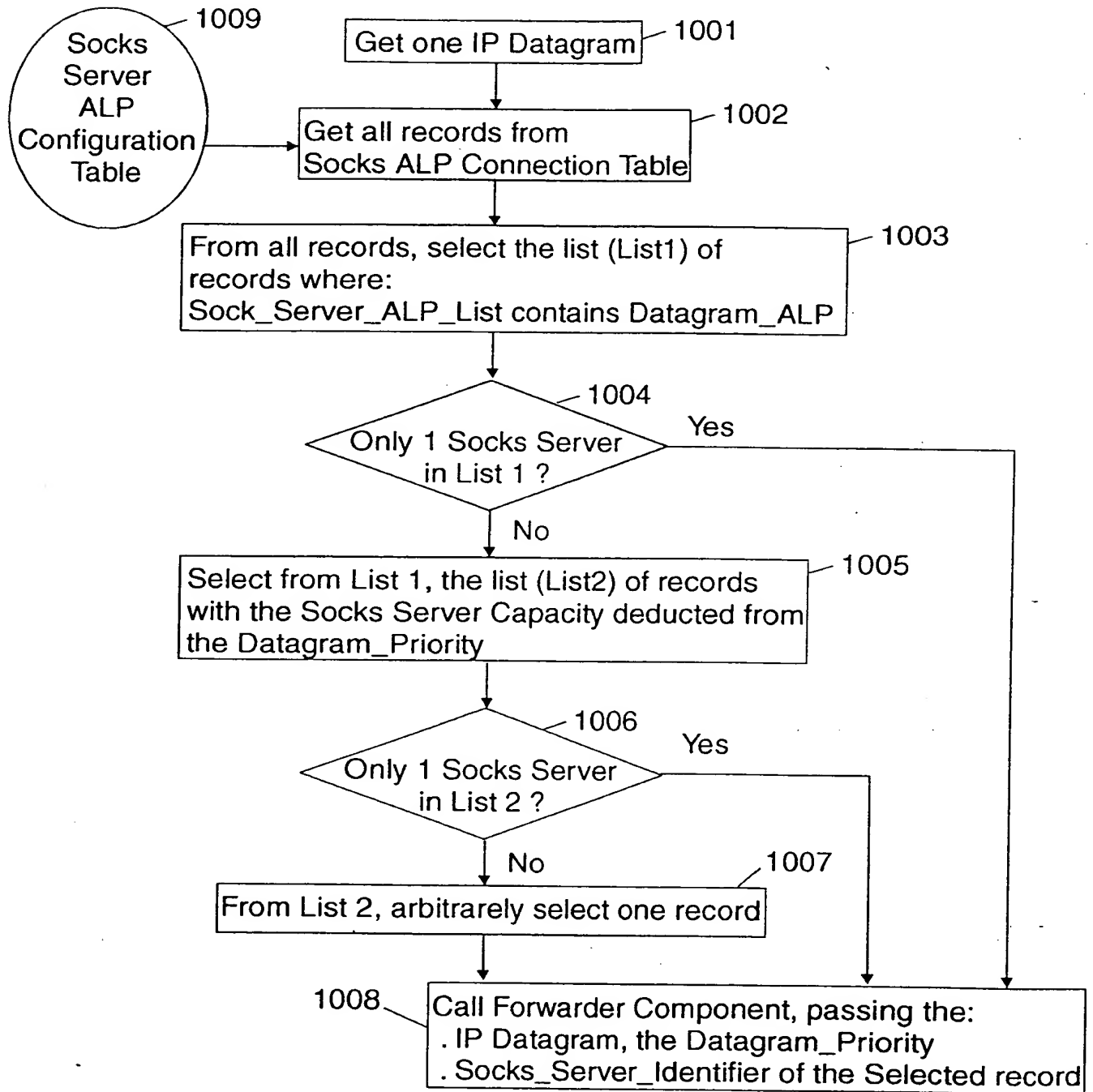


FIG. 10